MCAS BEAUFORT, SC
DUTY FORECASTER: SSGT K.L.

WHY ARE YOU HERE?

- ***STRENGTHEN TIES AND COORDINATION WITH OUR CUSTOMERS***
- ***REVIEW CURRENT POLICY***
  - ***PRIORITY OF SERVICES***
  - ***WEATHER SUPPORT CAPABILITES, SERVICES AND PRODUCTS***
- ***STATE CURRENT TECHNOLOGY***
  - ***YOUR KNOWLEDGE AND UNDERSTANDING OF WEATHER AND WEATHER PRODUCTS MAKES YOU A BETTER PILOT!***
- ***ESTABLISH FEEDBACK!***
  - ***CRITIQUE SHEET***

THE WEATHER MISSION

TO PROVIDE ACCURATE AND TIMELY 24 HOUR METEOROLOGICAL AND OCEANOGRAPHIC SERVICES TO THE AIR STATION, TENANT ORGANIZATIONS, AND TRANSIENT AIRCREWS

DID YOU KNOW Weather has Priority of Services?

- Services to Airborne Flights (METRO).
- Setting and Dissemination of Hazardous Weather Warning
- Transmission of TerminalAerodome Forecasts.
- Services to Aircrews at the Briefing Counter.
- Services to Aircrews via Weathervision/Intercom System.
- Services to Aircrews and Others via Telephone.
- Preparation of Rountine Forecasts, Charts, Maps, etc.

WEATHER CAPABILITES

"WHAT CAN WE DO FOR YOU?"

- **OPARS**
- **FLIGHT WEATHER PACKAGES**
- **EOTDA**
- **AREPS**
- **REFRACTIVE CONDITIONS**
- **SQUADRON BRIEFS**
- **NVG DATA**
- **SEARCH AND RESCUE MISSION**
- **TIDAL DATA**
- **CURRENTS**
- **OCEANOGRAPHY**
- **CLIMATOLOGY**
- **PLAIN LANGUAGE FORECASTS**
- **ASTRONOMICAL DATA**
- **SOLAR / LUNAR DATA**
- **HURRICANE BRIEFS**
- **DISSEMINATION OF ALL LOCAL AREA WARNINGS**
- **DD-175-1'S**
- **HEAT INDICIES**
- **WEATHER HOMEPAGE**
- **INSTRUMENT GROUND SCHOOL**

HWD PACKAGE

Horizontal Weather Depiction Package

- WHAT IS IT?
  - A complete weather package used by pilots/aircrews when transiting across large continental and/or oceanic areas. **
    REQUIRES A MINIMUM OF 2 HOURS PREPARATION TIME**
- MINIMUM CONTENTS:
  - U.S. NAVY FLIGHT FORECAST FOLDER (CNOC 3140/25)
  - DD FORM 175-1
  - HWD CHART
  - UPPER LEVEL WIND CHARTS
- ADDITIONAL CONTENTS WHEN APPROPIATE OR UPON REQUESTS:
  - OPARS
  - DITCH HEADINGS
  - ALTIMETER SETTINGS
  - ANY MISCELLANEOUS CHART/ PRODUCT REQUESTED.

OPARS

Optimum Path Aircraft Routing System

- What is it?
  - Consists of a set of computer programs which selects *optimum routes* for aircraft in support of aircraft operations.
  - An *optimum route* is defined as the selected aircraft path and altitude which is constrained by aircraft performance parameters, weather conditions, flight regulations, and minimum total fuel consumption.

CLIMATOLOGY

*CLIMO BRIEFS MAY BE GIVEN WHENEVER CONDITIONS CALL FOR AN UNFAMILIAR TERRITORY
- •WORLDWIDE COVERAGE AND CAPABILITIES
- •PREDEPLOYMENT

*REQUIRE AS MUCH ADVANCE NOTICE AS POSSIBLE, DUE TO CONTENT OF

*CLIMATOLOGY BRIEFS CONSIST OF THE FOLLOWING:
*GEOGRAPHY
*TERRAIN
*ASTRONMICAL DATA
*OPERATIONAL INTERESTS
- •HISTORICAL EM PROPAGATION CONDITIONS

*GENERAL CLIMATE
*SPECIFIC WEATHER ELEMENTS
- •WINDS
- •TEMPERATURES
- •DAYS AND/OR TIME IFR AND VFR
- •PRECIPITATION AMOUNTS

*ASSESSMENT AND RECOMMENDATIONS
- • ANY ASSESSMENTS THAT MIGHT BE PERTINENT TO OPERATIONS CAUSED BY WEATHER

EOTDA

ELECTRO-OPTICAL TACTICAL DECISION AID

What is an *EOTDA*?

An Electro-Optical Tactical Decision Aid is a software model that predicts the performance of air-to-ground weapon systems and direct view optics based on environmental and tactical information. Performance is expressed primarily in terms of maximum detection range and lock-on range. Results are displayed in alphanumeric or graphic format.

EOTDA OUTPUT

Alphanumeric and Graphic Output

- **IR SENSORS**
- MDT/MRT Range / Temp
- MDT/MRT Delta Ts
- Lock-on-Range / Temp
- Lock-on-Delta T
- Hot-to-cold
- IR Visibility
- Absolute Humidity
- 4 km Transmittance
- Solar Azimuth / Elevation
- Lunar Azimuth / Elevation
- Lunar Phase
- **T.V. SENSORS**
- Detection Range - Direct / Diffuse
- Lock on Range - Direct / Diffuse
- 4 km Transmissivity
- Ground Illuminance
- Solar-Lunar Azimuth/ Elevation
- **LASER SENSORS**
- Lock-on Ranges
- Ranging Ranges
- Rec Ranges
- 4km Transmissivity
- Solar-Lunar Azimuth/Elevation

“AREPS”
Advanced Refractive Effects Prediction System

- The AREPS Program computes and displays a number of tactical decision aids to include:
  - »Radar Probability of Detection
    - 90% Probability of detection vs 3 and 10 square meter target at smallest cross section
    - Jamming altitude and distances
  - »Electronic Surveillance Measure Vulnerability (ESM)
    - Stand-off Ranges
  - »UHF/VHF Communications
    - Surface-Surface, Surface-Air, Air-Air
  - »Simultaneous Radar Detection and ESM Vulnerability

SQUADRON STRIKE BRIEFS

- ANY SQUADRON
- ANYTIME 24/7
- SQUADRON READY-ROOMS OR BASE OPERATIONS
- WHAT THE BRIEF MAY CONSIST OF:
  - DD 175-1
  - TAKE-OFF, ENROUTE, ABORT BASE WEATHER
  - HWD CHART
  - UPPER LEVEL WINDS
  - SATELLITE
  - RADAR
  - EOTDA
  - IREPS/ AREPS (CLASSIFIED)

WEATHER HOMEPAGE

UPDATED WITH STATE OF THE ART TECHNOLOGY

- The Weather Homepage consists of :
  - » **Current and Forecast Local Weather**
  - » **Local Warnings**
  - » **Weax**
  - » **Flag conditions**
  - » **Hurricane Updates**
  - » **Satellite Images**
  - » **Doppler Radar Imagery**
  - » **Astrological and Tidal Information**
  - » **SIPERNET SOON!**

The homepage is accessible by
www.beaufort.usmc.mil/midds
or by entering the IP address of 204.223.64.3/midds

THE MOST CRITICAL ASPECT OF
THE WEATHER SERVICE IS
FEEDBACK !
*FEEDBACK ENABLES US TO VERIFY O
PRODUCTS AND FORECASTS*

DO NOT FLY HERE!!!
ARE THERE ANY QUESTIONS?